

#### Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr. Governor

Thomas W. Easterly Commissioner

100 North Senate Avenue Indianapolis, Indiana 46204-2251 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

#### **NOTICE OF 30-DAY PERIOD** FOR PUBLIC COMMENT

Preliminary Findings Regarding a New Source Review and Federally Enforceable State Operating Permit

for API Construction Corporation in Steuben County

FESOP No.: F151-24031-00064

The Indiana Department of Environmental Management (IDEM) has received an application from API Construction Corporation located at 225 South CR 600 West, Angola, Indiana, for a Federally Enforceable State Operating Permit (FESOP). IDEM's Office of Air Quality (OAQ) issues this type of permit to regulate the operation of sources that release air pollutants.

IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow API Construction Corporation to construct and operate a portable hot asphalt drum mix plant. If this would operate 365 days a year, 24 hours a day, 7 days a week, it could potentially release 24,901 tons of PM, 5,952 tons of PM-10, 329 tons of SO2, 4,253 tons of VOC, 47 tons of NOX, 116 tons of CO and 21 tons of HCL. The FESOP will limit emissions to less than 100 tons per year for PM-10, SO<sub>2</sub>, CO and VOC, less than 250 tons per year of PM, less than 10 tons per year of HCl (or any other single HAP) and less than 25 tons per year of any combination of HAPs. The permit requires fuel usage limits and the use of air pollution control equipment to limit the amount of air pollution that can be released.

A copy of the permit application and IDEM's preliminary findings are available at:

Carnegie Public Library 322 South Wayne Street Angola, IN 46703

and

**Northern Regional Office** 220 West Colfax Avenue, Suite 200 South Bend, IN 46601-1634

A copy of the preliminary findings is available on the Internet at: <a href="www.in.gov/idem/permits/air/pending.html">www.in.gov/idem/permits/air/pending.html</a>.

#### How can you participate in this process?

The day after this announcement is published in a newspaper marks the beginning of a 30-day public comment period. During that 30-day period, you may comment on this permit. If the 30<sup>th</sup> day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.





You may request that IDEM hold a public hearing about this permit. If adverse comments concerning the **air pollution impact** of this permit are received, with a request for a public hearing, IDEM may hold a public hearing. If a public hearing is held, IDEM will make a separate announcement of the date, time, and location of that hearing. At a hearing, you would have an opportunity to submit written comments, make verbal comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation or a request for a public hearing should be sent in writing to IDEM. If you do not want to comment at this time, but would like to be added to IDEM's mailing list to receive notice of future action related to this permit application, please contact IDEM. Please refer to permit number F151-24031-00064 in all correspondence.

#### Contact IDEM at:

IDEM, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251 (800) 451-6027, ask for extension 3-6878

Pursuant to Contract No. A305-0-00-34, IDEM, OAQ has assigned the processing of this permit application to Enviroplan Consulting. Therefore, questions should be directed to Linda Quigley of Enviroplan Consulting.

#### To contact the Permit Reviewer:

Linda Quigley
Enviroplan Consulting
Edgewater Commons II
81 Two Bridges Road
Fairfield, New Jersey 07004
Dial directly: 973-575-2555, ext. 3284
E-mail: Lquigley@enviroplan.com

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor or noise. For such issues, please contact your local officials.

#### What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12<sup>th</sup> floor of the Indiana Government Center North, 100 N. Senate, Indianapolis and the Northern Regional Office, 220 West Colfax Avenue, Suite 200, South Bend.

If you have any questions please contact Linda Quigley at the above address.

Nisha Sizemore, Chief Permits Branch Office of Air Quality

For additional information about air permits and how you can participate, please see IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: <a href="https://www.in.gov/idem/permits/guide/">www.in.gov/idem/permits/guide/</a>.

LQ/EVP



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# New Source Review and Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

# API Construction Corporation 225 South CR 600 West Angola, Indiana 46703

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F151-24031-00064	
Issued by:	Issuance Date:
Nisha Sizemore, Chief Permits Branch Office of Air Quality	Expiration Date:



API Construction Corporation Angola, Indiana Permit Reviewer: Linda Quigley/EVP

Page 2 of 43 F151-24031-00064

### **TABLE OF CONTENTS**

A. SOURC	E SUMMARY5
A.1	General Information [326 IAC 2-8-3(b)]
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
A.3	Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]
A.4	FESOP Applicability [326 IAC 2-8-2]
B. GENER	AL CONDITIONS7
B.1	Definitions [326 IAC 2-8-1]
B.2	Revocation of Permits [326 IAC 2-1.1-9(5)]
B.3	Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4][326 IAC 2-8]
B.4	Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]
B.5	Term of Conditions [326 IAC 2-1.1-9.5]
B.6	Enforceability [326 IAC 2-8-6]
B.7	Severability [326 IAC 2-8-4(4)]
B.8	Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
B.9	Duty to Provide Information [326 IAC 2-8-4(5)(E)]
B.10	Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]
B.11	Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
B.12	Compliance Order Issuance [326 IAC 2-8-5(b)]
B.13	Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]
	[326 IAC 2-8-5(a)(1)]
B.14	Emergency Provisions [326 IAC 2-8-12]
B.15	Prior Permits Superseded [326 IAC 2-1.1-9.5]
B.16	Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]
B.17	Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
B.18	Permit Modification, Reopening, Revocation and Reissuance, or Termination
	[326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]
B.19	Permit Renewal [326 IAC 2-8-3(h)]
B.20	Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]
B.21	Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]
B.22	Source Modification Requirement [326 IAC 2-8-11.1]
B.23	Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2]
D 04	[IC 13-30-3-1]
B.24	Transfer of Ownership or Operational Control [326 IAC 2-8-10]
B.25	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]
B.26	[326 IAC 2-1.1-7] Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]
D.20	Credible Evidence [326 IAC 2-6-4(3)][326 IAC 2-6-3][62 FR 6314] [326 IAC 1-1-6]
C. SOURC	E OPERATION CONDITIONS17
Fmissio	n Limitations and Standards [326 IAC 2-8-4(1)]
C.1	Particulate Emission Limitations For Processes with Process Weight Rates
0.1	Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]
C.2	Overall Source Limit [326 IAC 2-8]
C.3	Opacity [326 IAC 5-1]
C.4	Open Burning [326 IAC 4-1] [IC 13-17-9]
C.5	Incineration [326 IAC 4-2] [326 IAC 9-1-2]
C.6	Fugitive Dust Emissions [326 IAC 6-4]
C.7	Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
C.8	Stack Height [326 IAC 1-7]
C.9	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]
	, , , , , , , , , , , , , , , , , , , ,

Page 3 of 43

Permit Reviewer: Linda Quigley/EVP

D	RA	FT
---	----	----

	Testing I C.10	Requirements [326 IAC 2-8-4(3)] Performance Testing [326 IAC 3-6]
	Complia C.11	nce Requirements [326 IAC 2-1.1-11] Compliance Requirements [326 IAC 2-1.1-11]
	<b>Complia</b> C.12 C.13 C.14	nce Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]  Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]  Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]  Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)]  [326 IAC 2-8-5(1)]
	Corrective C.15 C.16 C.17	ve Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)] Risk Management Plan [326 IAC 2-8-4] [40 CFR 68] Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5] Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]
	<b>Record I</b> C.18 C.19	<b>Keeping and Reporting Requirements</b> [326 IAC 2-8-4(3)]  General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]  General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]
	Stratosp C.20	heric Ozone Protection Compliance with 40 CFR 82 and 326 IAC 22-1
D	.1. EMISS	SIONS UNIT OPERATION CONDITIONS24
	Emission D.1.1 D.1.2 D.1.3 D.1.4 D.1.5 D.1.6 D.1.7	PSD Minor Limit [326 IAC 2-2] Particulate Matter Less Than 10 Microns in Diameter (PM-10) [326 IAC 2-8] [326 IAC 2-2] Carbon monoxide (CO) [326 IAC 2-8] Volatile Organic Compounds (VOC) [326 IAC 8-1-6] Sulfur Dioxide (SO2) [326 IAC 7-1.1-1] [326 IAC 7-2-1] Fuel Usage [326 IAC 2-8] [326 IAC 2-2] Preventive Maintenance Plan [326 IAC 2-8-4(9)]
		nce Determination Requirements
	D.1.8 D.1.9 D.1.10 D.1.11	Testing Requirements [326 IAC 2-1.1-11] Sulfur Dioxide Emissions and Sulfur Content Hydrogen Chloride Emissions and Chlorine Content Particulate Control
	Complian D.1.12 D.1.13 D.1.14	nce Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)] Visible Emissions Notations Parametric Monitoring Broken or Failed Bag Detection
	<b>Record P</b> D.1.15 D.1.16	Keeping and Reporting Requirements [326 IAC 2-8-4(3)] Record Keeping Requirement Reporting Requirements
	New Sou	urce Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

D.1.17 General Provisions Relating to New Source Performance Standards (NSPS) for Hot Mix Asphalt Facilities [326 IAC 12-1][40 CFR Part 60, Subpart A][40 CFR Part 60, Subpart I]

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API Construction Corporation Angola, Indiana Permit Reviewer: Linda Quigley/EVP

D.1.18	New Source Performance Standards (NSPS) for Hot Mix Asphalt Facilities [40 CFR I Subpart I]	Part 60,
D.2. EMIS	SIONS UNIT OPERATION CONDITIONS - Cold Mix Asphalt Storage Piles	31
	n Limitations and Standards [326 IAC 2-8-4(1)]	
D.2.1	Volatile Organic Compound (VOC) [326 IAC 8-5-2][326 IAC 2-8-4][326 IAC 2-2]	
Record	Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]	
D.2.2	Record Keeping Requirements	
D.2.3	Reporting Requirements	
Certificatio	n Form	33
Emergency	Occurrence FormReport Forms	34
Quarterly F	Report Forms	36
Quarterly D	Deviation and Compliance Monitoring Report Form	40
Attachmen	t A	42
Construction	on Affidavit	43

Angola, Indiana

Permit Reviewer: Linda Quigley/EVP

# DRAFT

Page 5 of 43 F151-24031-00064

#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary hot asphalt drum mix plant.

Source Address: 225 South CR 600 West, Angola, Indiana 46703

Mailing Address: P.O. Box 191, Laotto, Indiana 46763

General Source Phone Number: (260) 897-2743

SIC Code: 2951 County Location: Steuben

Source Location Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit Program

Minor Source, under PSD Rules

Minor Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) hot asphalt drum mix dryer, approved for construction in 2007, with a maximum capacity of 200 tons per hour of raw material, equipped with one (1) 50 million British thermal units (MMBtu) per hour liquefied petroleum fuel fired burner using #2 fuel oil or re-refined waste oil as a backup fuels, equipped with one (1) jet pulse baghouse for particulate matter control, exhausting through one (1) stack, identified as SV-1;
- (b) One (1) 25,000 gallon asphalt storage tank;
- (c) One (1) 12,000 gallon asphalt storage tank;
- (d) One (1) 12,000 gallon No. 2 fuel oil storage tank.

Under 40 CFR 60, Subpart I, this is considered an affected hot mix asphalt facility.

#### A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight:
  - (1) One (1) No. 2 distillate fuel oil fired hot oil heater, with a maximum rated capacity of 1.0 million British thermal units per hour.
- (b) Combustion source flame safety purging on startup;
- (c) Paved and unpaved roads and parking lots with public access [326 IAC 6-4] [326 IAC 6-5].

API Construction Corporation Angola, Indiana

Permit Reviewer: Linda Quigley/EVP

**DRAFT** 

Page 6 of 43 F151-24031-00064

#### A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

# DRAFT

Page 7 of 43 F151-24031-00064

#### **SECTION B**

#### **GENERAL CONDITIONS**

#### B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

#### B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

#### B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4][326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and [326 IAC 2-8] when prior to the start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.
- (c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

#### B.4 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, F151-24031-00064, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

#### B.5 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

#### B.6 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

# DRAFT

Page 8 of 43 F151-24031-00064

#### B.7 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

#### B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

#### B.10 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

#### B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:

Page 9 of 43 F151-24031-00064

Permit Reviewer: Linda Quigley/EVP

- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification:
- (2) The compliance status;
- (3) Whether compliance was continuous or intermittent;
- (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### B.12 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

#### B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Page 10 of 43 F151-24031-00064

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

#### B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with ahealth-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance Section), or

Telephone Number: 317-233-0178 (ask for Compliance Section)

Facsimile Number: 317-233-6865

Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.



The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

#### B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F151-24031-00064 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or

- (3) deleted
- (b) All previous registrations and permits are superseded by this permit.

#### B.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

#### B.17 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

# B.18 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

#### B.19 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
  - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

#### B.20 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.21 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act:
  - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
  - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]
  The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

#### B.22 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

#### B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- Enter upon the Permittee's premises where a FESOP source is located, or emissions (a) related activity is conducted, or where records must be kept under the conditions of this permit;
- As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have (b) access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act. IC 13-14-2-2. IC 13-17-3-2. and IC 13-30-3-1. inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize (e) any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.24 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the (a) Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Angola, Indiana
Permit Reviewer: Linda Quigley/EVP

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.25 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

#### B.26 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

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Page 17 of 43 F151-24031-00064

#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

#### **Entire Source**

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

#### C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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Permit Reviewer: Linda Quigley/EVP

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

#### C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

#### C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

#### C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on 12/5/2006. The plan is included as Attachment A.

#### C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

#### C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.

- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the applicable emission control procedures in
  326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control
  requirements are applicable for any removal or disturbance of RACM greater than three
  (3) linear feet on pipes or three (3) square feet on any other facility components or a total
  of at least 0.75 cubic feet on all facility components.
- (f) Demolition and Renovation

  The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
  prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
  thoroughly inspect the affected portion of the facility for the presence of asbestos.

#### Testing Requirements [326 IAC 2-8-4(3)]

#### C.10 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251 no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

#### C.12 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

API Construction Corporation Angola, Indiana Permit Reviewer: Linda Quigley/EVP Page 21 of 43 F151-24031-00064

#### C.14 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

#### Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

#### C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

#### C.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;

Angola, Indiana Permit Reviewer: Linda Quigley/EVP

- (2) monitor performance data, if applicable; and
- (3)corrective actions taken.

#### C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- A retest to demonstrate compliance shall be performed within one hundred twenty (120) (b) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- IDEM, OAQ reserves the authority to take any actions allowed under law in response to (c) noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5] C.18

- Records of all required monitoring data, reports and support information required by this (a) permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- Unless otherwise specified in this permit, all record keeping requirements not already (b) legally required shall be implemented within ninety (90) days of permit issuance.

#### C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- The report required in (a) of this condition and reports required by conditions in Section D (b) of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

#### **Stratospheric Ozone Protection**

#### C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Page 24 of 43 F151-24031-00064

#### SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

#### **Emissions Unit Description:**

One (1) hot asphalt drum mix dryer, approved for construction in 2007, with a maximum capacity of 200 tons per hour of raw material, equipped with one (1) 50 million British thermal units (MMBtu) per hour liquefied petroleum fuel fired burner using #2 fuel oil or re-refined waste oil as a backup fuels, equipped with one (1) jet pulse baghouse for particulate matter control, exhausting through one (1) stack, identified as SV-1.

Under 40 CFR 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities, the aggregate drum mix dryer is considered an affected hot mix asphalt facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 PSD Minor Limit [326 IAC 2-2]

Particulate matter emissions from the aggregate mixing and drying operation shall not exceed 0.24 pound PM per ton of asphalt mix.

This limits total source-wide PM emissions to less than 250 tons per year. Therefore, compliance with this limit will render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

#### D.1.2 Particulate Matter Less Than 10 Microns In Diameter (PM-10) [326 IAC 2-8-4][326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, particulate matter less than 10 microns in diameter emissions from the aggregate mixing and drying operation shall not exceed 0.10 pound of PM-10 per ton of asphalt mix.

This limits total source-wide PM-10 emissions to less than 100 tons per year. Compliance with this limit will satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

#### D.1.3 Carbon monoxide (CO) [326 IAC 2-8]

Pursuant to 326 IAC 2-8-4, the following shall apply:

- (a) CO emissions from the drum mix dryer shall not exceed 0.13 pound of CO per ton of hot mix asphalt produced.
- (b) The amount of hot mix asphalt produced in the drum mixer and dryer shall not exceed 1,500,588 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

This limits total source-wide CO emissions to less than 100 tons per year. Compliance with this limit will satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) not applicable.

Page 25 of 43 F151-24031-00064 Angola, Indiana DRAFT Permit Reviewer: Linda Quigley/EVP

#### Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

- VOC emissions from the drum mix dryer shall not exceed 0.032 pound of VOC per ton of hot mix asphalt produced.
- (b) The amount of hot mix asphalt produced in the drum mixer and dryer shall not exceed 1,500,588 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

This will limit VOC emissions from the drum mix dryer to less than 25 tons per year. Compliance with this limit will render the requirements of 326 IAC 8-1-6 not applicable to this facility.

#### Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1][326 IAC 7-2-1] D.1.5

- Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 50 million Btu per hour burner for the aggregate dryer shall be limited to 0.5 pounds per million Btu heat input or a sulfur content of less than or equal to 0.5% when using distillate oil.
- (b) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 50 million Btu per hour burner for the aggregate dryer shall be limited to 1.6 pounds per million Btu heat input or a sulfur content of less than or equal to 1.5 percent when using re-refined waste oil. The source has accepted a sulfur content limit of 1.4 percent for re-refined waste oil.
- (c) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

#### Fuel Usage [326 IAC 2-8-4] [326 IAC 2-2] D.1.6

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

- (a) The sulfur content of the re-refined waste oil used in the 50 MMBtu per hour burner for the aggregate dryer shall not exceed 1.4 percent.
- (b) The chlorine content of the re-refined waste oil used in the 50 MMBtu per hour burner for the aggregate dryer shall not exceed 0.2 percent.
- (c) The HCI emissions from the 50 MMBtu per hour burner for the aggregate dryer shall be limited to less than 13.2 pounds of HCl per 1,000 gallons of waste oil burned, based on a chlorine content limit of 0.2 percent.
- (d) The usage of re-refined waste fuel oil with a limited sulfur content of 1.4% and a maximum chlorine content of 0.2% in the 50 MMBtu per hour aggregate dryer burner shall be limited to 947,598 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, so that source-wide SO<sub>2</sub> emissions are limited to less than 100 tons per year and source-wide HCl emissions are limited to less than 10 tons per year.
- (e) For the purposes of determining compliance, every 1,000 gallons of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% burned shall be equivalent to 349 gallons of rerefined waste oil based on SO<sub>2</sub> emissions, such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.

Compliance with these limits will satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Page 26 of 43 F151-24031-00064

#### D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

#### **Compliance Determination Requirements**

#### D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) Within 60 days of achieving the maximum production rate, but no later than 180 days after start-up of the new aggregate dryer burner, in order to demonstrate compliance with Conditions D.1.1, D.1.2, and D.1.18, the Permittee shall perform PM and PM-10 testing on the aggregate mixing and drying operation utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10.
- (b) Within 60 days of achieving the maximum production rate, but no later than 180 days after start-up of the new aggregate dryer burner, opacity testing shall be performed on the mixing and drying operation utilizing methods per 40 CFR Part 60 Appendix A, to demonstrate compliance with the opacity limitation of Condition D.1.18.

These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C-Performance Testing.

#### D.1.9 Sulfur Dioxide Emissions and Sulfur Content

Compliance for sulfur dioxide shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed 0.5 pounds per million Btu heat input when burning No. 2 distillate fuel oil and 1.6 pounds per million Btu heat input when burning re-refined waste oil by:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 50 MMBtu per hour burner for the aggregate dryer, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (b) through (c) above shall not be refuted by evidence of compliance pursuant to the other method.

#### D.1.10 Hydrogen Chloride Emissions and Chlorine Content

The Permittee shall demonstrate that the chlorine content of the fuel used for the aggregate dryers does not exceed 0.2 percent by weight, when operating on waste oil, by providing vendor analysis of fuel delivered accompanied by a vendor certification.

Page 27 of 43 F151-24031-00064

#### D.1.11 Particulate Control

- (a) The baghouse for particulate control shall be in operation and control emissions from the aggregate mixing and drying operation at all times that the aggregate mixing and drying operation is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

#### Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

#### D.1.12 Visible Emissions Notations

- (a) Visible emission notations of the aggregate dryer and burner baghouse stack exhaust, and the conveying, material transfer points, and screening shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### D.1.13 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the aggregate mixing and drying operation, at least once per day when the aggregate dryer and burner are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 9.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

#### D.1.14 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### D.1.15 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.5 and D.1.6, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO<sub>2</sub> and HCL emission limits established in Conditions D.1.5 and D.1.6.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual re-refined waste oil and re-refined waste oil equivalent usage per month since last compliance determination period and equivalent SO<sub>2</sub> and HCL emissions;
  - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period;

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (7) A statement from the fuel supplier that certifies the chlorine content of the waste oil.
- (b) To document compliance with Conditions D.1.3 and D.1.4, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the annual throughput limits to the aggregate dryers established in Conditions D.1.3 and D.1.4.
  - (1) Calendar dates covered in the compliance determination period; and

- (2) Asphalt mix throughput to the drum mix aggregate dryer per month since the last compliance determination period.
- (c) The Permittee shall maintain records sufficient to verify compliance with the procedures specified in Conditions D.1.9(a)(2) or D.1.9(b) if applicable. Records shall be maintained for a period of five (5) years and shall be made available upon request by IDEM.
- (d) To document compliance with Condition D.1.12, the Permittee shall maintain daily records of visible emission notations of the aggregate dryer and burner baghouse stack exhaust and the conveying, material transfer points, and screening.
- (e) To document compliance with Condition D.1.13, the Permittee shall maintain daily records of the pressure drop during normal operation when venting to the atmosphere.
- (f) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.16 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.3, D.1.4 and D.1.6 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]

D.1.17 General Provisions Relating to New Source Performance Standards (NSPS) for Hot Mix Asphalt Facilities [326 IAC 12-1][40 CFR Part 60, Subpart A] [40 CFR Part 60, Subpart I]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart I.

D.1.18 New Source Performance Standards (NSPS) for Hot Mix Asphalt Facilities [40 CFR Part 60, Subpart I]

Pursuant to 40 CFR Part 60, Subpart I, the Permittee shall comply with the provisions of 40 CFR 60, Subpart I specified as follows:

#### § 60.90 Applicability and designation of affected facility.

- (a) The affected facility to which the provisions of this subpart apply is each hot mix asphalt facility. For the purpose of this subpart, a hot mix asphalt facility is comprised only of any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems.
- (b) Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.

#### § 60.91 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

Page 30 of 43 F151-24031-00064

(a) Hot mix asphalt facility means any facility, as described in §60.90, used to manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements.

#### § 60.92 Standard for particulate matter.

- (a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:
- (1) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf).
- (2) Exhibit 20 percent opacity, or greater.

#### § 60.93 Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
- (b) The owner or operator shall determine compliance with the particulate matter standards in §60.92 as follows:
- (1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).
- (2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

# DRAFT

Page 31 of 43 F151-24031-00064

#### **SECTION D.2**

#### **FACILITY CONDITIONS**

#### **Emissions Unit Description:**

(c) cold-mix (stockpile mix) asphalt storage piles.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.2.1 Volatile Organic Compound (VOC) [326 IAC 8-5-2][326 IAC 2-8-4][326 IAC 2-2]

- (a) Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), the use of cutback asphalt or asphalt emulsion shall not contain more than seven percent (7%) oil distillate by volume of emulsion for any paving application except the following purposes:
  - (1) penetrating prime coating
  - (2) stockpile storage
  - (3) application during the months of November, December, January, February and March.
- (b) The VOC solvent usage as cut back diluent in the liquid binder used in cold mix asphalt production shall be limited such that VOC emissions shall not exceed 61.79 tons per twelve (12) consecutive months. This shall be achieved by limiting the total VOC solvent usage of any one selected binder to not exceed the stated limit above for that binder during the last twelve (12) months. When more than one binder is used, the formula in (c)(4) must be applied so that the total VOC emitted does not exceed 61.79 tons per twelve (12) consecutive month period, based on the following liquid binder definitions:
  - (1) <u>Cut back asphalt rapid cure</u>, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.
  - (2) <u>Cut back asphalt medium cure</u>, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.
  - (3) <u>Cut back asphalt slow cure</u>, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.
- (c) The liquid binder used in cold mix asphalt production shall be limited as follows:
  - (1) Cutback asphalt rapid cure liquid binder usage shall not exceed 65.05 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
  - (2) Cutback asphalt medium cure liquid binder usage shall not exceed 88.28 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
  - (3) Cutback asphalt slow cure liquid binder usage shall not exceed 247.17 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.



(4) The VOC solvent allotments in subpart (c)(1) through (c)(3) of this condition shall be adjusted when more than one type of binder is used per twelve (12) month consecutive period. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

# Tons of solvent contained in binder = tons of VOC emitted Adjustment ratio

Type of binder	tons VOC solvent	adjustment ratio	tons VOC emitted
cutback asphalt		1	
rapid cure			
cutback asphalt		1.36	
medium cure			
cutback asphalt		3.8	
slow cure			

The equivalent total tons of VOC of the combined liquid binders shall be less than 61.79 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-7 (Part 70), and 327 IAC 2-2 (PSD), do not apply.

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

#### D.2.2 Record Keeping Requirements

To document compliance with Condition D.2.1(b), the Permittee shall maintain records in accordance with (a) through (d) below. Records maintained for (a) through (d) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.2.1(b).

- (a) Calendar dates covered in the compliance determination period;
- (b) Cutback asphalt binder usage per month since the last compliance determination period;
- (c) VOC solvent content by weight of the cutback asphalt binder used each month; and
- (d) Amount of VOC solvent used in the production of cold mix asphalt, and the amount of VOC emitted each month.

All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.2.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY**

#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) **CERTIFICATION**

Source Name: **API Construction Corporation** 

225 South CR 600 West, Angola, Indiana 46703 P.O. Box 191, Laotto, Indiana 46763 Source Address:

Mailing Address:

FESOP Permit No.: F151-24031-00064

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
Please check what document is being certified:
□ Annual Compliance Certification Letter
□ Test Result (specify)
□ Report (specify)
□ Notification (specify)
□ Affidavit (specify)
□ Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Date:

## DRAFT

Page 34 of 43 F151-24031-00064

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

100 North Senate Avenue Indianapolis, Indiana 46204-2251 Phone: 317-233-0178 Fax: 317-233-6865

# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: API Construction Corporation

Source Address: 225 South CR 600 West, Angola, Indiana 46703

Mailing Address: P.O. Box 191, Laotto, Indiana 46763

FESOP Permit No.: F151-24031-00064

#### This form consists of 2 pages

Page 1 of 2

- ☐ This is an emergency as defined in 326 IAC 2-7-1(12)
  - The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
  - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

Permit Reviewer: Linda Quigley/EVP



Page 35 of 43 F151-24031-00064

If any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency? Describe:	Y N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>X</sub> , CO, Pb, other	r:
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the faciliti imminent injury to persons, severe damage to equipment, substantial los of product or raw materials of substantial economic value:	
Form Completed by:	
Title / Position:	
Date:	
Phone:	

A certification is not required for this report.

Angola, Indiana

Permit Reviewer: Linda Quigley/EVP



Page 36 of 43 F151-24031-00064

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

#### **FESOP Quarterly Report**

Source Name: API Construction Corporation

Source Address: 225 South CR 600 West, Angola, Indiana 46703

Mailing Address: P.O. Box 191, Laotto, Indiana 46763

FESOP Permit No.: F151-24031-00064

Facility: 50 MMBtu per hour aggregate dryer burner

Parameter: Re-refined waste oil usage limit to limit SO<sub>2</sub> and HCL emissions

Limit: The usage of re-refined waste fuel oil with a limited sulfur content of 1.4% and a maximum

chlorine content of 0.2% in the 50 MMBtu per hour aggregate dryer burner shall be limited to 947,598 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month. For purposes of determining compliance with this limit, the fuel

equivalency ratios in Condition D.1.6 shall be used.

YEAR:			

	Column 1	Column 2	Column 1 + Column 2
Month	re-refined waste oil and equivalent usage this month (gallons)	re-refined waste oil and equivalent usage previous 11 Months (gallons)	12 month total re-refined waste oil and equivalent usage (gallons)
Month 1			
Month 2			
Month 3			

□ No deviation	occurred in this quarter.
	ccurred in this quarter. s been reported on:
Cubmitted by	
Submitted by:	
Title / Position:	
Signature:	
Date:	
Phone:	

Attach a signed certification to complete this report.

Permit Reviewer: Linda Quigley/EVP

# DRAFT

Page 37 of 43 F151-24031-00064

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

#### **FESOP Quarterly Report**

Source Name:	API Construction C	Corporation
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Source Address: 225 South CR 600 West, Angola, Indiana 46703

Mailing Address: P.O. Box 191, Laotto, Indiana 46763

FESOP Permit No.: F151-24031-00064
Facility: Drum mixer and dryer
Parameter: Hot Mix Asphalt Production

Limit: The amount of hot mix asphalt produced in the drum mixer and dryer shall not

exceed 1,500,588 tons per twelve (12) consecutive month period, with

compliance determined at the end of each month.

YEAR:_		

	Column 1	Column 2	Column 1 + Column 2	
Month	This Month Asphalt throughput (tons)	Previous 11 Months Asphalt throughput (tons)	12 Month Total Asphalt throughput (tons)	
Month 1				
Month 2				
Month 3				

<ul> <li>No deviation occurred in this quarter.</li> <li>Deviation/s occurred in this quarter.</li> <li>Deviation has been reported on:</li> </ul>				
Submitted by: Title / Position: Signature: Date: Phone:				

Attach a signed certification to complete this report.

Angola, Indiana

Permit Reviewer: Linda Quigley/EVP

DRAFT

Page 38 of 43 F151-24031-00064

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

# **Single Liquid Binder Solvent Quarterly Report**

API Construction Corporation 225 South CR 600 West, Angola, Indiana 46703 P.O. Box 191, Laotto, Indiana 46763 F151-24031-00064 Cold-mix asphalt storage piles VOC Cutback asphalt rapid cure liquid binder usage shall not exceed 65.05 tons of VOC solvent per twelve (12) consecutive month period. Cutback asphalt medium cure liquid binder usage shall not exceed 88.28 tons of VOC solvent per twelve (12) consecutive month period. Cutback asphalt slow cure liquid binder usage shall not exceed 247.17 tons of VOC solvent per twelve (12) consecutive month period. Compliance shall be determined at the end of each month.				
	YEAR:			
Limit applica	ble:	•		
Column 1	Column 2	Column 1 + Column 2		
Liquid Binder Usage This Month (tons)	Liquid Binder Usage Previous 11 Months (tons)	Liquid Binder Usage 12 Month Total (tons)		
ation/s occurred in this r	eporting period.			
	Date:			
Attach a sigr	ned certification to complete this	s report.		
	225 South CR 600 V P.O. Box 191, Laotto F151-24031-00064 Cold-mix asphalt sto VOC Cutback asphalt rapi VOC solvent per twe medium cure liquid b twelve (12) consecut usage shall not exce month period. Comp  binder solvent was th Limit applica ne binder requires the  Column 1  Liquid Binder Usage This Month (tons)  eviation occurred in this reation/s occurred in this reation has been reported	225 South CR 600 West, Angola, Indiana 46703 P.O. Box 191, Laotto, Indiana 46763 F151-24031-00064 Cold-mix asphalt storage piles VOC Cutback asphalt rapid cure liquid binder usage shall VOC solvent per twelve (12) consecutive month per medium cure liquid binder usage shall not exceed 8 twelve (12) consecutive month period. Cutback asp usage shall not exceed 247.17 tons of VOC solvent month period. Compliance shall be determined at t  YEAR: binder solvent was the only liquid binder solvent usage Limit applicable: ne binder requires the use of the "Multiple Liquid B  Column 1 Column 2  Liquid Binder Usage This Month (tons) Previous 11 Months (tons)  eviation occurred in this reporting period. ation/s occurred in this reporting period. ation has been reported on:		

API Construction Corporation

Angola, Indiana

Permit Reviewer: Linda Quigley/EVP

# DRAFT

Page 39 of 43 F151-24031-00064

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH Multiple Liquid Binder Solvent Quarterly Report

Source Name: API Construction Corporation

Source Address: 225 South CR 600 West, Angola, Indiana 46703

Mailing Address: P.O. Box 191, Laotto, Indiana 46763

FESOP Permit No.: F151-24031-00064

Facility: Cold-mix asphalt storage piles

Parameter: VOC

Limit: 61.79 tons per twelve consecutive month period, with compliance determined at the end of each month.

Year:

Month	Type of Liquid binder	Solvent Usage This Month (tons)	Divisor	VOC emitted This Month (tons) for each solvent	VOC emitted This Month (tons)	VOC emitted Previous 11 Months (tons)	This month + Previous 11 months =VOC emitted 12 Month Total(tons)
Month 1	Cutback asphalt rapid cure		1				
	Cutback asphalt medium cure		1.36				
	Cutback asphalt slow cure		3.8				
	Emulsified asphalt		2.04				
	other asphalt		38				
Month 2	Cutback asphalt rapid cure		1				
	Cutback asphalt medium cure		1.36				
	Cutback asphalt slow cure		3.8				
	Emulsified asphalt		2.04				
	other asphalt		38				
Month 3	Cutback asphalt rapid cure		1				
	Cutback asphalt medium cure		1.36				
	Cutback asphalt slow cure		3.8				
	Emulsified asphalt		2.04				
	other asphalt		38				

9	No deviation	occurred in	this re	eporting	period
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₹	Deviation/s occurred in this reporting period
	Bandadan ban bannan menantadan

boriation has been reperted on	
Submitted by:	Date:
Title / Position:	Phone:
Signature:	

Page 40 of 43 F151-24031-00064



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: **API Construction Corporation** 

225 South CR 600 West, Angola, Indiana 46703 P.O. Box 191, Laotto, Indiana 46763 Source Address:

Mailing Address

FESOP Permit No.:	F151-24031-0006	,	a 40703	
Mon	ths:	_to	Year:	 Page 1 of 2
requirements, the date steps taken must be re requirement that exists	e(s) of each deviati eported. A deviatio s independent of th	ion, the prob on required t he permit, sl	calendar year. Any deviation to bable cause of the deviation, at to be reported pursuant to an at hall be reported according to the included in this report. Addition	from the and the response applicable he schedule stated in
	If no deviations o		ease specify in the box marked	
□ NO DEVIATIONS (	OCCURRED THIS	REPORTIN	NG PERIOD.	
☐ THE FOLLOWING	DEVIATIONS OC	CURRED T	HIS REPORTING PERIOD	
Permit Requirement	(specify permit cor	ndition #)		
Date of Deviation:			Duration of Deviation:	
Number of Deviation	s:			
Probable Cause of D	eviation:			
Response Steps Tak	en:			
Permit Requirement	(specify permit cor	ndition #)		
Date of Deviation:			Duration of Deviation:	
Number of Deviation	s:			
Probable Cause of De	eviation:			
Response Steps Tak	en:			

Page 41 of 43 F151-24031-00064

Page 2 of 2

	Page 2 01 2
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed by:	
Title / Position:	
Date:	
Phone:	

Attach a signed certification to complete this report.

DRAFT

Page 42 of 43 F151-24031-00064

### Attachment A

# **API Construction Corporation**

#### ASPHALT PLANT SITE FUGITIVE DUST CONTROL PLAN

- (a) Truck cargoes will be covered during transit to reduce fugitive dust emissions from paved roadways. If fugitive dust emissions from any paved or unpaved roadways are observed, API Corp will use wet suppression or other methods to control these emissions.
- (b) Fugitive particulate matter emissions from parking lots and yards shall be controlled by applying water when necessary
- (c) Fugitive particulate matter emissions from storage piles and the conveying/handling of raw materials shall be controlled by applying water when necessary.

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Page 43 of 43 F151-24031-00064

Mail to: Permit Administration & Development Section Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

API Construction Corporation 225 South CR 600 West Angola, Indiana 46763

# **Affidavit of Construction** , being duly sworn upon my oath, depose and say: (Name of the Authorized Representative) County, Indiana and being of sound mind and over twenty-one 1. I live in \_\_\_\_\_ (21) years of age, I am competent to give this affidavit. I hold the position of \_\_\_\_\_\_ for \_\_\_\_\_. (Title) (Company Name) 2. 3. By virtue of my position with \_\_\_\_ \_\_,I have personal (Company Name) knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of (Company Name) 4. I hereby certify that API Construction Corporation, 225 South CR 600 West, Angola, Indiana 46763, completed construction of the portable hot asphalt drum mix plant on \_\_\_\_\_in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on 12/5/06 and as permitted pursuant to FESOP No. F151-24031-00064, Plant ID No. 151-00064 issued on Further Affiant said not. I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief. Signature Date STATE OF INDIANA) )SS COUNTY OF \_\_\_\_\_\_) Subscribed and sworn to me, a notary public in and for \_\_\_\_\_\_ County and State of Indiana on this \_\_\_\_\_\_, 20 \_\_\_\_\_\_, 20 \_\_\_\_\_\_. My Commission expires: Signature

Name (typed or printed)

Section 10:

# Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a New Source Review and Federally Enforceable State Operating Permit (FESOP)

#### **Source Background and Description**

Source Name: API Construction Corporation

Source Location: 225 South CR 600 W, Angola, Indiana 46703

County: Steuben SIC Code: 2951

Operation Permit No.: F151-24031-00064
Permit Reviewer: Linda Quigley/EVP

The Office of Air Quality (OAQ) has reviewed a FESOP application from API Construction Corporation relating to the construction and operation of a stationary hot asphalt drum mix plant.

#### **New Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) hot asphalt drum mix dryer, approved for construction in 2007, with a maximum capacity of 200 tons per hour of raw material, equipped with one (1) 50 million British thermal units (MMBtu) per hour liquefied petroleum fuel fired burner using #2 fuel oil or re-refined waste oil as a backup fuels, equipped with one (1) jet pulse baghouse for particulate matter control, exhausting through one (1) stack, identified as SV-1;
- (b) One (1) 25,000 gallon asphalt storage tank;
- (c) One (1) 12,000 gallon asphalt storage tank;
- (d) One (1) 12,000 gallon No. 2 fuel oil storage tank.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted emission units operating at this source during this review process.

#### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight:
  - (1) One (1) No. 2 distillate fuel oil fired hot oil heater, with a maximum rated capacity of 1.0 million British thermal units per hour.
- (b) Combustion source flame safety purging on startup;
- (c) Paved and unpaved roads and parking lots with public access.

#### **Existing Approvals**

This source does not have any existing approvals.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on December 5, 2006. Additional information was received on January 17, 2007 and January 30, 2007.

#### **Emission Calculations**

See Appendix A of this document for detailed emission calculations, pages 1 through 10.

#### **Potential to Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	Greater than 250
PM-10	Greater than 250
SO <sub>2</sub>	Greater than 250
VOC	Greater than 250
CO	Greater than 100,
	Less than 250
$NO_x$	Less than 100

HAPs	Potential to Emit (tons/yr)
HCL	20.95
Formaldehyde	2.79
Toluene	2.54
Total	Greater than 25

Complete listing of HAPs located in Appendix A

API Construction Corporation Page 3 of 12
Angola, Indiana F151-24031-00064

Permit Reviewer: LQ/EVP

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10, SO<sub>2</sub>, VOC and CO are each equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.

- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.
- (c) Fugitive Emissions
  This type of operation is not one of the twenty-eight (28) listed source categories under
  326 IAC 2-2, however there are applicable New Source Performance Standards that were
  in effect on August 7, 1980. Therefore, the fugitive particulate matter (PM) and volatile
  organic compound (VOC) emissions are counted toward determination of PSD and
  Emission Offset applicability.

#### **Potential to Emit After Issuance**

The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

		Potential	To Emit	(tons/year)	)			
Process/emission unit	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>X</sub>	Single	Total
							HAP	HAPs
Aggregate Dryer <sup>(1)</sup>	209.80 <sup>(2)</sup>	89.18 <sup>(3)</sup>	97.51	24.00 <sup>(6)</sup>	97.54 <sup>(6)</sup>	45.98	6.25 <sup>(5)</sup>	12.56
Hot Oil Heater	0.07	0.03	2.39	0.01	0.17	0.67	0.00	0.00
Conveying/Handling	9.68	4.58	0.00	0.00	0.00	0.00	0.00	0.00
Unpaved Roads <sup>(4)</sup>	28.32	4.76	0.00	0.00	0.00	0.00	0.00	0.00
Load Out and Silo Filling	0.97	0.97	0.00	14.10	2.21	0.00	0.00	0.22
Aggregate Storage	1.06	0.37	0.00	0.00	0.00	0.00	0.00	0.00
Cold Mix Storage	0.00	0.00	0.00	61.79	0.00	0.00	0.00	0.00
Total Emissions	249.9	99.9	99.9	99.9	99.9	46.65	6.25	12.78

- (1) Limited PTE based on re-refined waste oil with a sulfur content of 1.4%, chlorine content of 0.2%, and usage limitation of 947,598 gallons per twelve (12) consecutive month period, with compliance determined at the end of each month to comply with 326 IAC 2-8 (FESOP).
- (2) Maximum allowable PM emissions in order to render 326 IAC 2-2 (PSD) not applicable.
- (3) Maximum allowable PM10 emissions in order to comply with 326 IAC 2-8 (FESOP).
- (4) Potential to emit after controls.
- (5) Largest single HAP = HCL
- (6) Limited CO and VOC emissions based on hot mix asphalt production limit of 1,500,588 tons per twelve (12) consecutive month period.

#### **County Attainment Status**

The source is located in Steuben County.

Pollutant	Status
PM2.5	Attainment
PM-10	Attainment
SO <sub>2</sub>	Attainment
$NO_2$	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoking the one-hour ozone standard in Indiana.
- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx emissions are considered when evaluating the rule applicability relating to ozone. Steuben County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (c) Steuben County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.
- (d) Steuben County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

#### **Federal Rule Applicability**

(a) This source is subject to the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.90, Subpart I) because it meets the definition of a hot mix asphalt facility pursuant to the rule and it was constructed after June 11, 1973.

The affected facility includes:

One (1) hot asphalt drum mix dryer, with a maximum capacity of 200 tons per hour of raw material, equipped with one (1) 50 million British thermal units (MMBtu) per hour liquefied petroleum fuel fired burner using #2 fuel oil or re-refined waste oil as a backup fuels, equipped with one (1) jet pulse baghouse for particulate matter control, exhausting through one (1) stack, identified as SV-1.

Nonapplicable portions of the NSPS will not be included in the permit. This source is subject to the following portions of Subpart I.

- (1) 40 CFR 60.90;
- (2) 40 CFR 60.91;
- (3) 40 CFR 60.92;
- (4) 40 CFR 60.93.

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to this aggregate dryer burner except when otherwise specified in 40 CFR Part 60, Subpart I.

- (b) The requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) "Standards of Performance for Volatile Organic Liquid Storage Vessels" are not included in the permit for the one (1) 25,000 gallon asphalt storage tank. Although it was constructed after July 23, 1984, and has a storage capacity greater than 75 cubic meters, but less than 151 cubic meters, the liquid asphalt stored in the tank has a maximum true vapor pressure of less than 15.0 kPa. Therefore, pursuant to 40 CFR 60.110b(b) this tank is not subject to this rule.
- (c) The requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) "Standards of Performance for Volatile Organic Liquid Storage Vessels" are not included in the permit for the one (1) 12,000 gallon asphalt storage tank and the one (1) 12,000 gallon No. 2 fuel oil storage tank because each has a storage capacity of less than 75 cubic meters.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) included in this permit.
- (e) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not included in this permit. Generally, such requirements apply to a Part 70 source that involves a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, which meets the following criteria:
  - (1) The unit is subject to an emission limitation or standard for an applicable regulated air pollutant;
  - (2) The unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard; and
  - (3) The unit has a potential to emit before controls equal to or greater than the applicable Part 70 major source threshold for the regulated pollutant.

As a FESOP source, this source has accepted federally enforceable limits such that the requirements of 326 IAC 2-7 (Part 70) do not apply. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not included in this permit.

#### State Rule Applicability – Entire Source

#### 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is not subject to the requirements of this rule. The allowable emissions of all regulated pollutants, except PM, are less than 100 tons per year after application of all federally enforceable emission limits as discussed below under 326 IAC 2-8. The allowable emissions of PM are less than 250 tons per year after application of a federally enforceable emission limit of 0.24 pound of PM per ton of asphalt mix for the aggregate mixing and drying operation equivalent to 209.80 tons per year (47.90 pounds per hour) based on a maximum throughput of 200 tons of asphalt mix per hour. Therefore the requirements of 326 IAC 2-2 (PSD) do not apply. This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2.

#### 326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). This source has a limited potential to emit of single HAP and total HAP emissions below 10 and 25 tons per year, respectively. Therefore, this rule does not apply.

#### 326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake or Porter counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

#### 326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the following limits shall apply:

(a) The usage of re-refined waste fuel oil with a limited sulfur content of 1.4% and a maximum chlorine content of 0.2% in the 50 MMBtu per hour aggregate dryer burner shall be limited to 947,598 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, so that SO<sub>2</sub> emissions are limited to less than 100 tons per year and source-wide HCI emissions are limited to less than 10 tons per year.

The HCl emissions from the 50 MMBtu per hour burner for the aggregate dryer shall be limited to less than 13.2 pounds of HCl per 1,000 gallons of waste oil burned, based on a chlorine content limit of 0.2 percent.

This fuel usage limitation will limit HCl emissions to less than 10 tons per year based on a chlorine content limit of 0.2 percent. Since HCl is the only single HAP with unrestricted potential emissions of greater than 10 tons per year, this limit will ensure that source-wide single HAP and total HAP emissions are limited to less than 10 and 25 tons per year, respectively.

(b) For purposes of determining compliance with (a) above, every 1,000 gallons of No.2 fuel oil burned in the 50 MMBtu per hour burner for the aggregate dryer shall be equivalent to 349 gallons of re-refined waste fuel oil based on SO<sub>2</sub> emissions, such that the total gallons of No.2 fuel oil and No.2 fuel oil equivalent input does not exceed the limit specified.

API Construction Corporation Angola, Indiana Permit Reviewer: LQ/EVP Page 7 of 12 F151-24031-00064

(c) PM-10 emissions from the aggregate mixing and drying operation shall be limited to 0.10 pounds of PM-10 emitted per ton of asphalt produced, including both filterable and condensible fractions. This is equivalent to a PM-10 emission limit of 20.36 pounds per hour, based on a maximum throughput of 200 tons of asphalt mix per hour. Based on 8,760 hours of operation per 12 consecutive month period, this limits PM-10 emissions from the aggregate mixing and drying operation to 89.18 tons per year for a source-wide total potential to emit of less than 100 tons per year. The source will comply with the PM-10 emission limit by utilizing a baghouse for controlling PM-10 emissions to less than 20.36 pounds per hour from the aggregate dryer.

- (d) The annual production of hot mix asphalt in the drum mixer and dryer shall be limited to 1,500,588 tons of asphalt mix per twelve (12) consecutive month period, with compliance determined at the end of each month. This limit is required to limit the source's emissions of CO to less than 100 tons per year. This will also limit VOC emissions from the dryer/burner to less than 25 tons per year. Therefore, the requirements of 326 IAC 2-7 (Part 70) and 326 IAC 8-1-6 (BACT) are not applicable.
- (e) CO emissions from the drum mixer and dryer shall not exceed 0.13 pounds of CO per ton of hot mix asphalt produced. This will limit total source-wide CO emissions to less than 100 tons per year. Compliance with this limit will satisfy 326 IAC 2-8-4 and render the requirements of Part 70 (326 IAC 2-7) and PSD (326 IAC 2-2) not applicable.
- (f) The VOC solvent usage as cut back diluent in the liquid binder used in cold mix asphalt production shall be limited such that VOC emissions shall not exceed 61.79 tons per twelve (12) consecutive months. This shall be achieved by limiting the total VOC solvent usage of any one selected binder to not exceed the stated limit above for that binder during the last twelve (12) months. When more than one binder is used, the formula in (c)(4) must be applied so that the total VOC emitted does not exceed 61.79 tons per twelve (12) consecutive month period, based on the following liquid binder definitions:
  - (1) <u>Cut back asphalt rapid cure</u>, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.
  - (2) <u>Cut back asphalt medium cure</u>, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.
  - (3) <u>Cut back asphalt slow cure</u>, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.

The liquid binder used in cold mix asphalt production shall be limited as follows:

- (1) Cutback asphalt rapid cure liquid binder usage shall not exceed 65.05 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
- (2) Cutback asphalt medium cure liquid binder usage shall not exceed 88.28 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
- (3) Cutback asphalt slow cure liquid binder usage shall not exceed 247.17 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

(4) The VOC solvent allotments in subpart (c)(1) through (c)(3) of this condition shall be adjusted when more than one type of binder is used per twelve (12) month consecutive period. In order to determine the tons per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

# Tons of solvent contained in binder = tons of VOC emitted Adjustment ratio

Type of binder	tons VOC	adjustment	tons VOC
	solvent	ratio	emitted
cutback asphalt		1	
rapid cure			
cutback asphalt		1.36	
medium cure			
cutback asphalt		3.8	
slow cure			

The equivalent total tons of VOC of the combined liquid binders shall be less than 61.79 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-7 (Part 70) and 327 IAC 2-2 (PSD) do not apply.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

#### 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is subject to 326 IAC 6-5 for fugitive particulate matter emissions. Pursuant to 326 IAC 6-5, for any new source which has not received all the necessary preconstruction approvals before December 13, 1985, a fugitive dust control plan must be submitted, reviewed and approved. The fugitive dust control plan for this source includes watering the following fugitive emission activities on an as needed basis:

(a) Truck cargoes will be covered during transit to reduce fugitive dust emissions from paved roadways. If fugitive dust emissions from any paved or unpaved roadways are observed, API Corp will use wet suppression or other methods to control these emissions.

Page 9 of 12 F151-24031-00064

API Construction Corporation Angola, Indiana Permit Reviewer: LQ/EVP

(b) Fugitive particulate matter emissions from parking lots and yards shall be controlled by applying water when necessary

(c) Fugitive particulate matter emissions from storage piles and the conveying/handling of raw materials shall be controlled by applying water when necessary.

#### State Rule Applicability – Individual Facilities

#### 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The aggregate mixing and drying operation is not subject to the requirements of 326 IAC 6-3-2. This rule does not apply if the limitation established in the rule is less stringent than applicable limitations in 326 IAC 12. Since the applicable PM emission limit established by 326 IAC 12, 40 CFR 60, Subpart I, is less than the PM limit that would be established by 326 IAC 6-3-2 (58.51 pounds per hour, see Appendix A, page 10 of 10), the more stringent limit applies and the limit pursuant to 326 IAC 6-3-2 does not apply.

#### 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The sulfur dioxide emissions from the 50 MMBtu/hr dryer burning re-refined waste oil shall be limited to 1.6 pounds per MMBtu heat input. This equates to a fuel oil sulfur content limit of 1.5%. Therefore, the sulfur content of the fuel must be less than or equal to 1.5% in order to comply with this rule (See Appendix A, Page 10 of 10 for detailed calculations). The source will be able to comply with this rule by using re-refined waste oil with a sulfur content of 1.4% or less.

The sulfur dioxide emissions from the 50 MMBtu/hr dryer burning distillate oil shall be limited to 0.5 lb/MMBtu heat input. This equates to a fuel oil sulfur content limit of 0.5%. Therefore, the sulfur content of the fuel must be less than or equal to 0.5% in order to comply with this rule (See Appendix A, Page 10 of 10 for detailed calculations). The source will be able to comply with this rule by using No. 2 distillate fuel oil with a sulfur content of 0.5% or less.

The 1.0 MMBtu/hr hot oil heater is not subject to the requirements of this rule because potential  $SO_2$  emissions from this unit is less than 25 tons per year.

#### 326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements)

This source is subject to 326 IAC 7-2-1 (Reporting Requirements). This rule requires the source to submit to the Office of Air Quality upon request records of sulfur content, heat content, fuel consumption, and sulfur dioxide emission rates based on a calendar-month average.

#### 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

The storage tanks at this source are not subject to 326 IAC 8-4-3 because the tanks have storage capacities less than 39,000 gallons each.

#### 326 IAC 8-1-6 (BACT)

The drum mixer has a limited potential to emit of less than 24.9 tons per year of VOC, based on a limited throughput of 1,500,588 tons per year. VOC emissions from the drum mixer and dryer shall not exceed 0.032 pound of VOC per ton of hot mix asphalt produced. This will limit VOC emissions from the aggregate dryer to less than 24.9 tons per year. Compliance with this limit will render the requirements of 326 IAC 8-1-6 not applicable.

#### 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving)

This rule applies to any paving application constructed after January 1, 1980 located anywhere in the state. Pursuant to this rule, no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven percent (7%) oil distillate by volume of emulsion for any paving application except the following purposes:

(a) Penetrating prime coating;

Page 10 of 12 F151-24031-00064

API Construction Corporation Angola, Indiana Permit Reviewer: LQ/EVP

- (b) Stockpile storage;
- (c) Application during the months of November, December, January, February and March.

This source uses cutback asphalt to manufacture stockpile mix on a limited basis. The cutback asphalt contains less than 7% oil distillate by volume. It is only manufactured during the winter months and is in compliance with 326 IAC 8-5-2.

#### **Testing Requirements**

This source is subject to 40 CFR 60, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities), and shall comply with the particulate matter (PM) and opacity compliance testing requirements of the rule. OAQ has also required PM-10 testing to demonstrate FESOP compliance. Within one hundred and eighty (180) days after initial startup, the Permittee shall conduct performance tests to determine compliance with 40 CFR 60, Subpart I and 326 IAC 2-8 (FESOP).

Repeat testing will be required five years after the last compliance stack test.

#### **Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the approporiate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- 1. The conveying, material transfer points, screening, and mixing and drying have applicable compliance monitoring conditions as specified below:
  - (a) Visible emission notations of the aggregate dryer and burner baghouse stack exhaust, and the conveying, material transfer points, and screening shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
  - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
  - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (f) The Permittee shall record the pressure drop across the baghouse used in conjunction with the aggregate mixing and drying operation, at least once per day when the aggregate dryer and burner are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 9.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C Response to Excursions or Exceedances, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

- (g) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (h) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

These monitoring conditions are necessary because the baghouse for the aggregate mixing and drying operation must operate properly to ensure compliance with 40 CFR 60, Subpart I, 326 IAC 2-8-4 (FESOP), and to ensure that the requirements of 326 IAC 2-2 (PSD) do not apply.

Page 12 of 12 F151-24031-00064

API Construction Corporation Angola, Indiana Permit Reviewer: LQ/EVP

#### **Air Quality Impacts from Minor Sources**

#### **Modeling Overview**

Pursuant to 326 IAC 2-1.1-5, IDEM, OAQ, has conducted a modeling analysis of the Limited Potential to Emit (PTE) criteria pollutants from the proposed modification to replace the existing aggregate dryer burner with a new dryer burner to estimate whether the Limited PTE criteria pollutants will cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS).

#### Modeling Results - Criteria Pollutants

The modeling results indicate that the Limited PTE criteria pollutants from the modification will not exceed the National Ambient Air Quality Standards (NAAQS).

#### Conclusion

The operation of this stationary drum mix asphalt plant shall be subject to the conditions of the New Source Review and FESOP 151-24031-00064.

Company Name: Plant Location: County: Permit Reviewer: API Construction Corp. 225 South CR 600 West, Angola, IN Steuben Linda Quigley/EVP

#### \*\* aggregate dryer burner\*\*

The following calculations determine the amount of emissions created by liquefied petroleum gas combustion, from the aggregate dryer burner, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.5 - Liquefied Petroleum Gas Combustion, Tables 1.5-1

Criteria Pollutant:	50	MMBtu/hr * 8,760 hr/yr	* Ef (lb/MMcf) = (ton/yr)
	90,500	Btu/gal * 2,000 lb/ton	_
P M:	0.6	lb/1000 gal = <b>1.45</b>	ton/yr
P M-10:		· ·	ton/yr
S O 2:	0.6	lb/1000 gal = 1.45	ton/yr
NOx:	19.0	lb/1000 gal = 45.98	ton/yr
V O C:	0.5	lb/1000 gal = 1.21	ton/yr
C O:	3.2	lb/1000 gal = 7.74	ton/vr

The following calculations determine the amount of emissions created by the combustion of # 2 distillate fuel oil

© 0.5 % sulfur, from the aggregate dryer burner, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Tables 1.3-1, 1.3-2, and 1.3-3.

Criteria Pollutant:	50	MMBtu/hr * 8,760 hr/yr		* Ef (lb/1,000 gal) = (ton/yr)
	130,000	Btu/gal * 2,000 lb/ton		_
Р М:	2.0	lb/1000 gal =	3.37	ton/yr
P M-10:	3.3	lb/1000 gal =	5.56	ton/yr
S O 2:	71.9	lb/1000 gal =	121.07	ton/yr
NOx:	24.0	lb/1000 gal =	40.43	ton/yr
V O C:	0.20	lb/1000 gal =	0.34	ton/yr
C O:	5.0	lb/1000 gal =	8.42	ton/yr

 $The following \ calculations \ determine \ the \ amount \ of \ emissions \ created \ by \ the \ combustion \ of \ re-refined \ waste \ oil$ 

0.20 % Chlorine and 1.40 % sulfur, and @ @ 3.00 % ash, and @

0.00 % lead, from the aggregate dryer burner, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.11 - Waste Oil Combustion, Tables 1.11-1, 1.11-2, , 1.11-3,

Criteria Pollutant:		50	MMBtu/hr * 8,760 hr/yr		* Ef (lb/1,000 gal) = (ton/yr)
		138,000	Btu/gal * 2,000 lb/ton		_
	PM:	192.0	lb/1000 gal =	304.70	ton/yr
	P M-10:	153.0	lb/1000 gal =	242.80	ton/yr
	S O 2:	205.8	lb/1000 gal =	326.60	ton/yr
	NOx:	19.0	lb/1000 gal =	30.15	ton/yr
	V O C:	1.00	lb/1000 gal =	1.59	ton/yr
	C O:	5.0	lb/1000 gal =	7.93	ton/yr
	HCI:	13.20000	lb/1000 gal =	20.95	ton/yr
	l pad:	0.0	lb/1000 gal =	0.00	tonlyr

Criteria Pollutant:			Worst Case Fuel	
P M:	304.70	ton/yr	Re-refined Waste Oil	
P M-10:	242.80	ton/yr	Re-refined Waste Oil	
S O 2:	326.60	ton/yr	Re-refined Waste Oil	
NOx:	45.98	ton/yr	Liquefied Petroleum Gas	
V O C:	1.59	ton/yr	Re-refined Waste Oil	
C O:	8.42	ton/yr	No. 2 fuel Oil	
HCL:	20.95	ton/yr	Re-refined Waste Oil	
Lead:	0.00	ton/yr	Re-refined Waste Oil	

9.52 tons/yr

API Construction Corp. 225 South CR 600 West, Angola, IN

#### \*\*hot oil heater\*\*

The following calculations determine the amount of emissions created by the combustion of #2 distillate fuel oil © 0.5 % sulfur, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Tables 1.3-1, 1.3-2, and 1.3-3.

Criteria Pollutant:	1 MMBtu/hr * 8,760 hr/yr	* Ef (lb/1,000 gal) = (ton/yr)	
	130,000 Btu/gal * 2,000 lb/ton		
PM	2.0 lb/1000 gal = 0.07	ton/yr	
P M-10	1.0 lb/1000 gal = 0.03	ton/yr	
S O 2	71.0 lb/1000 gal = 2.39	ton/yr	
NOx	20.0 lb/1000 gal = 0.67	ton/yr	
VOC	0.20 lb/1000 gal = 0.01	ton/yr	
CO	5.0 lb/1000 gal = 0.17	ton/yr	

<sup>\* \*</sup> aggregate drying: drum-mix plant \* \*

The following calculations determine the amount of worst case emissions created by aggregate drying before controls, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Tables 11.1-5 and 11.1-10 for a drum mix dryer which has the capability of combusting either fuel oil, natural gas, or re-refined waste oil:

	Pollutant:	Ef	lb/ton x			200	ton/hr x		8,760 hr/yr	
						2,000	lb/ton			
Criteria Pollut	ant:									
			PM:	28	lb/ton =		24,528.00	ton/yr		
		Р	M-10:	6.5	lb/ton =		5,694.00	ton/yr		
			VOC:	0.032	lb/ton =		28.03	ton/yr		
			HCI:	0.00021	lb/ton =		0.18	ton/yr		
			CO:	0.13	lb/ton =		113.88	ton/yr		
			NOx:	0.055	lb/ton =		48.18	ton/yr		

<sup>\* \*</sup> conveying / handling \* \*

The following calculations determine the amount of emissions created by material handling, based on 8,760 hours of use and AP-42, Section 13.2.4, Equation 1. The emission factor for calculating PM emissions is calculated as follows:

#### PM-10 Emissions

8,760 hr/hr

 $E = k^*(0.0032)^*(((U/5)^1.3)/((M/2)^1.4))$ 5.23E-03 lb PM-10/ton 1.11E-02 lb PM/ton 0.35 (particle size multiplier for <10um) where k = 0.74 (particle size multiplier for <30um) 12 mph mean wind speed M = 1.5 material moisture content (%) 200 ton/hr \* 8,760 hrs/yr \* Ef (lb/ton of material) = (ton/yr) 2,000 lb/ton

Total PM 10 Emissions: 4.58 tons/vr **Total PM Emissions:** 9.68 tons/yr

\* \* unpaved roads \* \*

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

#### I. Triaxel

25 trip/hr x 0.25 mile/trip x 2 (round trip ) x = 109500 miles per year  $Ef = k*(s/12)^a*(W/3)^b$ 0.17 lb PM-10/mile 1.03 lb PM/mile 4.9 (particle size multiplier for PM-10)
4.9 (particle size multiplier for PM)
0.6 mean % silt content of unpaved roads where k = k= s= 0.9 Constant for PM-10 a= 0.7 Constant for PM a= 0.45 Constant for PM and PM-10 b= 10 tons average vehicle weight 0.17 lb/mi x PM-10: 109500 mi/yr = 2000 lb/ton

> PM: 1.03 lb/mi x 109500 mi/yr = 56.64 tons/yr 2000 lb/ton

API Construction Corp. 225 South CR 600 West, Angola, IN

#### \* \* storage \* \*

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

	Silt Content	Pile Size	Storage Capacity	PM Emissions	PM-10 Emisions
Material	(wt %)	(acres)	(tons)	tons/yr	tons/yr
Sand	5.0	0.5	160	0.53	0.18
Gravel	5.0	0.5	160	0.53	0.18
Total				1.06	0.37

Sample Calculation:

Emissions (storage) = Ef \* (Pile Size in acres) \* (365 day/yr) (2,000 lb/ton)

Ef = 1.7\*(s/1.5)\*(365-p)/235\*(f/15)

= 5.79 lb/acre/day where s = 5.00 % silt

p = 125 days of rain greater than or equal to 0.01 inches f = 15 % of wind greater than or equal to 12 mph

\* \* load-out \* \*

The following calculations determine the amount of emissions created by plant load-out, based on 8,760 hours of use and USEPA's AP-42, Section 11.1, Tables 11.1-14 through 11.1-16.

PM/PM10 Ef = 0.000181 + 0.00141(-V)e((0.0251)(T+460)-20.43)

= 5.22E-04 lb PM or PM-10 per ton of asphalt mix produced

/here V = -0.5 asphalt volatility (default value of -0.5 used per AP-42)
T= 325 hot mix asphalt mix temperature in degrees F(default value of 325 used per AP-42)

PM/PM10 = 0.46 tons/yr

Total PAH HAPs = 0.03 tons/yr (5.93% of Organic PM emissions per AP-42)\*
Phenol = 0.01 tons/yr (1.18% of Organic PM emissions per AP-42)\*

TOC Ef = 0.0172(-V)e((0.0251)(T+460)-20.43)

= 4.16E-03 lb TOC per ton of asphalt mix produced

where V = -0.5 asphalt volatility (default value of -0.5 used per AP-42)

T= 325 hot mix asphalt mix temperature in degrees F(default value of 325 used per AP-42)

VOC = 3.42 tons/yr (94% of TOC emissions per AP-42)

Worst Case Single HAP
(Xylenes) = 0.02 tons/yr (0.49% of TOC emissions per AP-42)

Total Volatile HAPs = 0.05 tons/yr (1.5% of TOC emissions per AP-42)

CO Ef = 0.00558(-V)e((0.0251)(T+460)-20.43)

= 1.35E-03 lb CO per ton of asphalt mix produced

where V = -0.5 asphalt volatility (default value of -0.5 used per AP-42)

T= 325 hot mix asphalt mix temperature in degrees F(default value of 325 used per AP-42)

CO = 1.18 tons/yr

\* \* silo filling \* \*

The following calculations determine the amount of emissions created by silo filling, based on 8,760 hours of use and USEPA's AP-42, Section 11.1, Tables 11.1-14 through 11.1-16.

PM/PM10 Ef = 0.000332 + 0.00105(-V)e((0.0251)(T+460)-20.43)

= 5.86E-04 lb PM or PM-10 per ton of asphalt mix produced

where V = -0.5 asphalt volatility (default value of -0.5 used per AP-42)

T= 325 hot mix asphalt mix temperature in degrees F(default value of 325 used per AP-42)

PM/PM10 = 0.51 tons/yr

Total PAH HAPs = 0.03 tons/yr (11.40% of Organic PM emissions per AP-42)\*

Page 3 of 10

Operation Permit No. F151-24031-00064 Plant I D 151-00064

TOC Ef = 0.0504(-V)e((0.0251)(T+460)-20.43)

1.22E-02 lb TOC per ton of asphalt mix produced

where V = -0.5 asphalt volatility (default value of -0.5 used per AP-42)

T= 325 hot mix asphalt mix temperature in degrees F(default value of 325 used per AP-42)

VOC = 10.68 tons/yr (100% of TOC emissions per AP-42)

Worst Case Single HAP

(Formaldehyde) = 0.07 tons/yr (0.69% of TOC emissions per AP-42)

Total Volatile HAPs = 0.14 tons/yr (1.3% of TOC emissions per AP-42)

CO Ef = 0.00488(-V)e((0.0251)(T+460)-20.43)

= 1.18E-03 lb CO per ton of asphalt mix produced

where V = -0.5 asphalt volatility (default value of -0.5 used per AP-42)

T= 325 hot mix asphalt mix temperature in degrees F(default value of 325 used per AP-42)

CO = 1.03 tons/yr

Organic PM Ef = 0.00141(-V)e((0.0251)(T+460)-20.43)

= 3.41E-04 lb PM or PM-10 per ton of asphalt mix produced

where V = -0.5 asphalt volatility (default value of -0.5 used per AP-42)

325 hot mix asphalt mix temperature in degrees F(default value of 325 used per AP-42)

#### I. Cut back asphalt rapid cure

The following calculations determine the amount of VOC emissions created by the applicationstockpile mix containing cut back asphalt rapid cure of which 95% by weight of VOC is evaporated, based on 8,760 hours of operation.

VOC Emission Factor = 0.24035 weight percent flash-off of cold mix

Potential Throughput (tons/yr) = 1,752,000 tons/yr stockpile mix

Potential VOC Emissions (tons/yr) = Potential Throughput (tons/yr) \* VOC Emission Factor (wt% flash-off)

Potential VOC Emissions = 4210.93 tons/vr

#### II. Cut back asphalt medium cure

The following calculations determine the amount of VOC emissions created by the applicationstockpile mix containing cut back asphalt medium cure of which 70% by weight of VOC is evaporated, based on 8,760 hours of operation.

VOC Emission Factor =

0.2002 weight percent flash-off of cold mix

Potential Throughput (tons/yr) = 1,752,000 tons/yr stockpile mix

Potential VOC Emissions (tons/yr) = Potential Throughput (tons/yr) \* VOC Emission Factor (wt% flash-off)
Potential VOC Emissions = 3,507.50 tons/yr

\* Weight percent flash-off is based on use of gelled asphalt containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.

#### III. Cut back asphalt slow cure

The following calculations determine the amount of VOC emissions created by the applicationstockpile mix containing cut back asphalt slow cure of which 25% by weight of VOC is evaporated, based on 8,760 hours of operation.

VOC Emission Factor =

0.05 weight percent flash-off of cold mix

Potential Throughput (tons/yr) = 1,752,000 tons/yr stockpile mix

Potential VOC Emissions (tons/yr) = Potential Throughput (tons/yr)  $^{\star}$  VOC Emission Factor (wt% flash-off)

Potential VOC Emissions = 876.00 tons/y

\* Weight percent flash-off is based on use of gelled asphalt containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.

Worst Case from Cold Mix VOC Storage =

4,210.93 tons/yr

<sup>\*</sup> Organic PM emissions are calculated using the equation from Table 11.1-14.

<sup>\* \*</sup>cold mix VOC storage emissions \* \*

<sup>\*</sup> Weight percent flash-off is based on use of gelled asphalt containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.

	** summary of source emissions before controls **
Criteria Pollutants:	
P M:	24,901.12 ton/yr
P M-10:	5,952.28 ton/yr
\$ O 2:	328.99 ton/yr
N O x:	46.65 ton/yr
V O C:	4,253.07 ton/yr
C 0:	116.26 ton/yr
HCI:	20.95 ton/yr

\* \* source emissions after controls \* \*

In order to qualify for the FESOP program, this source must limit  $SO_2$  emissions to 99.9 tons per year. Consequently,  $SO_2$  emissions from the aggregate dryer must be limited as follows:  $SO_2$  limited emissions= 99.9 tons per year - 2.39 = tons per year from the hot oil heater 97.51 tons per year

\* Emissions of PM and PM-10 from aggregate drying operations are controlled with a 99.000 % control efficiency.

The following calculations determine the amount of emissions created by liquefied petroleum gas combustion, from the aggregate dryer.

Criteria Pollutant:	50	* Ef (lb/MMcf) = (ton/yr)	
	90,500	Btu/gal * 2,000 lb/ton	
P M:	0.6	lb/1000 gal = <b>1.45</b>	ton/yr
P M-10:	0.1	lb/1000 gal = <b>0.12</b>	ton/yr
S O 2:	0.6	lb/1000 gal = 1.45	ton/yr
N O x:	19.0	lb/1000 gal = 45.98	ton/yr
V O C:	0.5	lb/1000 gal = 1.21	ton/yr
C O:	3.2	lb/1000 gal = 7.74	ton/yr

The following calculations determine the amount of emissions created by the combustion of No. 2 distillate fuel oil

@ 0.5 % sulfur, from the aggregate dryer burner,

based on a fuel usage limitation of 2,713,594 gal/yr:

Criteria Pollutant:	2,714 Kgal/yr:	* Ef (lb/1,000 gal) = (ton/yr)
	2,000 lb/ton	
P	<b>1:</b> 2.0 lb/1000 gal =	2.71E-02 ton/yr
P M-1	0: 3.3 lb/1000 gal =	4.48E-02 ton/yr
s o	2: 71.9 lb/1000 gal =	97.51 ton/yr
N O	c: 24.0 lb/1000 gal =	32.56 ton/yr
VO	0.20 lb/1000 gal =	0.27 ton/yr
C	5.0 lb/1000 gal =	6.78 ton/yr

The following calculations determine the amount of emissions created by waste oil @ 1.40 % sulfur based on a fuel usage limitation of 947,598 gal/yr:

	Waste Oil:		948 kgal/yr 2000 lb/ton	* Ef (lb/1000 gal) = (ton/yr)
PM:	192.0	lb/1000 gal =	9.10E-01	ton/yr *
P M-10:	153.0	lb/1000 gal =	7.25E-01	ton/yr *
S O 2:	205.8	lb/1000 gal =	97.51	ton/yr
NOx:	19.0	lb/1000 gal =	9.00	ton/yr
V O C:	1.0	lb/1000 gal =	0.47	ton/yr
C O:	5.0	lb/1000 gal =	2.37	ton/yr
HCL:	13.2	lb/1000 gal =	6.25	ton/yr

Criteria Pollutant:			Worst Case Fuel	
	PM:	1.45 ton/yr *	Liquefied Petroleum Gas	
	P M-10:	0.72 ton/yr *	Re-refined Waste Oil	
	S O 2:	97.51 ton/yr	Re-refined Waste Oil & No. 2 fuel oils	
	NOx:	45.98 ton/yr	Liquefied Petroleum Gas	
	V O C:	1.21 ton/yr	Liquefied Petroleum Gas	
	C O:	7.74 ton/yr	Liquefied Petroleum Gas	
	HCI:	6.25 ton/yr	Re-refined Waste Oil	

Operation Permit No. F151-24031-00064 Plant I D 151-00064

\* \* Fuel Usage Limitations \* \*

Fuel: No. 2 Distillate Oil

 97.51 tons SO2/year limited
 x
 3369.23
 Kgals

 121.07 tons SO2/year potential
 year potential

= 2713.594 Kgals year limited

Fuel: Waste Oil

 97.51 tons SO2/year limited
 x
 3173.91 Kgals

 326.60 tons SO2/year potential
 year potential

= 947.60 <u>Kgals</u> vear limited

Fuel equivalence limit for No. 2 fuel oil based on SO2 emissions from waste oil

 121.07
 No. 2 F.O. potential emissions (ton/yr)
 /
 326.60
 Waste oil potential emissions (ton/yr)

 3369.23
 No. 2 F.O. potential usage (kgal/yr)
 3173.91
 Waste oil potential usage (kgal/yr)

0.3492 <u>Kgal waste oil burned</u> Kgal waste oil burned

Aggregate Dryer limited production in order to limit CO emissions

Pollutant:	Ef	lb/ton x			171.3	ton/hr x	8,760 hr/yr
					2,000	lb/ton	
	co	:	0.13	lb/ton =		97.54	ton/yr
	NOx	:	0.055	lb/ton =		41.27	ton/yr
	VOC	:	0.032	lb/ton =		24.01	ton/vr

\* \*cold mix VOC storage limitations \* \*

The following calculations determine the amount of VOC emissions created by the application of liquid binder for cold mix stockpiles, based on the source's use of cut back asphalt with solvent as the liquid binder type. Cut back asphalt with solvent is defined with the following properties:

Cut back asphalt rapid cure:

Maximum weight % of VOC solvent in binder 25.3% Weight % VOC solvent in binder that evaporates: 95.0%

Volume % of diluent allowed = 7% (per 326 IAC 8-5-2)

Cut back asphalt medium cure:

Maximum weight % of VOC solvent in binder 28.6% Weight % VOC solvent in binder that evaporates: 70.0%

Volume % of diluent allowed = 7% (per 326 IAC 8-5-2)

Cut back asphalt slow cure:

Maximum weight % of VOC solvent in binder 20.0% Weight % VOC solvent in binder that evaporates: 25.0%

Volume % of diluent allowed = 7% (per 326 IAC 8-5-2)

In order to qualify for the FESOP program, and make the requirements of 326 IAC 8-1-6 not applicable,

VOC solvent usage as diluent in the liquid binder used in the production of cold mix asphalt from the plant shall be limited as follows:

(99.90 tons VOC/yr - 38.11 tons VOC/yr from other sources after controls = 61.79 tons of VOC emitted per year

This is equivalent to limiting the usage of cut back asphalt with solvent liquid binder to less than the following:

65.05 tons of VOC solvent per 12 consecutive month period for rapid cure cut back asphalt.
88.28 tons of VOC solvent per 12 consecutive month period for medium cure cut back asphalt.
247.17 tons of VOC solvent per 12 consecutive month period for slow cure cut back asphalt.

Page 6 of 10

<sup>\* \*</sup> Fuel Equivalence Limitations \* \*

#### \* \* source emissions after controls \* \*

dryer burner	combustion & aggre	egate drying:	nonfugitive				
P M:	24832.70	ton/yr x	0.0	01%	emitted after controls =	1.45	ton/yr
P M-10:	5936.80	ton/yr x	0.0	01%	emitted after controls =	0.72	2 ton/yr
S O 2:	97.51	ton/yr x	100.0	00%	emitted after controls =	97.51	l ton/yr
NOx:	45.98	ton/yr x	100.0	00%	emitted after controls =	45.98	3 ton/yr
VOC:	24.00	ton/yr x	100.0	00%	emitted after controls =	24.00	) ton/yr
C O:	97.54	ton/yr x	100.0	00%	emitted after controls =	97.54	ton/yr
HCI:		ton/yr x	100.0	00%	emitted after controls =		ton/yr
	hot oil heater:		nonfugitive				
P M:	0.07	ton/yr x		00%	emitted after controls =	0.07	ton/yr
P M-10:		ton/yr x	100.0	00%	emitted after controls =		ton/yr
S O 2:	2.39	ton/yr x	100.0	00%	emitted after controls =	2.39	ton/yr
NOx:		ton/yr x	100.0	00%	emitted after controls =	0.67	ton/yr
V O C:	0.01	ton/yr x	100.0	00%	emitted after controls =	0.01	ton/yr
C O:	0.17	ton/yr x	100.0	00%	emitted after controls =	0.17	ton/yr
	conveying/handling:		fugitive				
P M:		ton/yr x		50%	emitted after controls =	4.84	ton/yr
P M-10:		ton/yr x		50%	emitted after controls =		ton/yr
	unpaved roads:		fugitive				
P M:	56.64	ton/yr x		50%	emitted after controls =	28.32	ton/yr
P M-10:	9.52	ton/yr x		50%	emitted after controls =	4.76	ton/yr
	storage piles:		fugitive				
P M:		ton/yr x		50%	emitted after controls =	0.53	ton/yr
P M-10:	0.37	ton/yr x		50%	emitted after controls =	0.18	ton/yr
	load-out		fugitive				
P M:	0.46	ton/yr x	10	00%	emitted after controls =	0.46	ton/yr
P M-10:	0.46	ton/yr x	10	00%	emitted after controls =	0.46	ton/yr
VOC:	3.42	ton/yr x	10	00%	emitted after controls =	3.42	ton/yr
CO:	1.18	ton/yr x	10	00%	emitted after controls =	1.18	ton/yr
	Silo filling		fugitive				
P M:	0.51	ton/yr x	10	00%	emitted after controls =	0.51	ton/yr
P M-10:	0.51	ton/yr x	10	00%	emitted after controls =	0.51	ton/yr
VOC:	10.68	ton/yr x	10	00%	emitted after controls =	10.68	ton/yr
CO:	1.03	ton/yr x	10	00%	emitted after controls =	1.03	ton/yr
	Cold mix storage:		fugitive				
VOC:		ton/yr x		47%	emitted after controls =	61.79	ton/yr

		* * summary of sou	rce emissions after limitation and contro	ols * *
Criteria Pollutant:				
		Non-Fugitive	Fugitive	Total
	PM:	1.52 ton/yr	34.66 ton/yr	36.18 ton/yr
	PM-10:	0.76 ton/yr	8.21 ton/yr	8.97 ton/yr
	S O 2:	99.90 ton/yr	0.00 ton/yr	99.90 ton/yr
	NOx:	46.65 ton/yr	0.00 ton/yr	46.65 ton/yr
	V O C:	24.01 ton/yr	75.89 ton/yr	99.90 ton/yr
	C O:	97.71 ton/yr	2.22 ton/yr	99.92 ton/yr
	HCI:	6.25 ton/yr	0.00 ton/yr	6.25 ton/yr

Operation Permit No. F151-24031-00064 Plant I D 151-00064

#### Hazardous Air Pollutants (HAPs)

#### \*\* aggregate dryer burner\*\*

The following calculations determine the amount of HAP emissions created by the combustion of distillate fuel oil before & after controls @ 0.50 % sulfur, from the aggregate dryer burner, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Table 1.3-10.

Hazardous Air Pollutants (HAPs):

		50 MMBtu/hr * 8760 hr/yr	* Ef (lb/10^12 Btu) = (ton/yr)	
		2,000 lb/ton		
		Potential To Emit	Limited Emissions	
Arsenic:	4 lb/10^12 Btu =	8.76E-04 ton/yr	8.76E-06 ton/yr	
Beryllium:	3 lb/10^12 Btu =	6.57E-04 ton/yr	6.57E-06 ton/yr	
Cadmium:	3 lb/10^12 Btu =	6.57E-04 ton/yr	6.57E-06 ton/yr	
Chromium:	3 lb/10^12 Btu =	6.57E-04 ton/yr	6.57E-06 ton/yr	
Lead:	9 lb/10^12 Btu =	1.97E-03 ton/yr	1.97E-05 ton/yr	
Manganese:	6 lb/10^12 Btu =	1.31E-03 ton/yr	1.31E-05 ton/yr	
Mercury:	3 lb/10^12 Btu =	6.57E-04 ton/yr	6.57E-06 ton/yr	
Nickel:	3 lb/10^12 Btu =	6.57E-04 ton/yr	6.57E-06 ton/yr	
Selenium:	15 lb/10^12 Btu =	3.29E-03 ton/yr	3.29E-05 ton/yr	
	Total HAPs =	1.07E-02 ton/yr	1.07E-04 ton/yr	

#### \* \* aggregate drying: drum-mixer \* \*

The following calculations determine the amount of HAP emissions created by aggregate drying before & after controls, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 11.1 - Hot Mix Asphalt Plants, Table 11.1-10 for a drum mix dryer which can be fired with either fuel oil or natural gas. The HAP emission factors represent the worst case emissions (fuel oil combustion).

			171.3		
Ef	lb/ton x		200	ton/hr x	8760 hr/yr
			2000	lb/ton	
HAPs):				Potential To Emit	Limited Emissions
Acetaldehyd	e 3.20E-04	lb/ton =		2.80E-01 ton/yr	2.40E-01 ton/yr
Acrole	n 2.60E-05	lb/ton =		2.28E-02 ton/yr	1.95E-02 ton/yr
Benzen	3.90E-04	lb/ton =		3.42E-01 ton/yr	2.93E-01 ton/yr
Ethyl benzen	2.40E-04	lb/ton =		2.10E-01 ton/yr	1.80E-01 ton/yr
Formaldehyde	3.10E-03	lb/ton =		2.72E+00 ton/yr	2.33E+00 ton/yr
Hexan	9.20E-04	lb/ton =		8.06E-01 ton/yr	6.90E-01 ton/yr
Trimethylpentane	4.00E-05	lb/ton =		3.50E-02 ton/yr	3.00E-02 ton/yr
lethyl chloroforn	1: 4.8E-05	lb/ton =		4.20E-02 ton/yr	3.60E-02 ton/yr
Propionaldehyd	1.30E-04	lb/ton =		1.14E-01 ton/yr	9.75E-02 ton/yr
Quinor	e 1.60E-04	lb/ton =		1.40E-01 ton/yr	1.20E-01 ton/yr
Toluene	2.90E-03	lb/ton =		2.54E+00 ton/yr	2.18E+00 ton/yr
Total PAH HAP	1.100E-04	lb/ton =		9.64E-02 ton/yr	8.25E-02 ton/yr
Xylen	2.00E-04	lb/ton =		1.75E-01 ton/yr	1.50E-01 ton/yr
		Total HAPs =		7.52E+00 ton/yr	6.44E+00 ton/yr
	HAPs): Acetaldehyd Acrolei Benzene Ethyl benzene Formaldehyde Hexane Irimethylpentane Methyl chloroform Propionaldehyde Quinon Toluene	HAPs):  Acetaldehyde 3.20E-04	HAPs):  Acetaldehyde	Ef         lb/ton x         200           2000           HAPs):           Acetaldehyde         3.20E-04         lb/ton =           Acrolein         2.60E-05         lb/ton =           Benzene:         3.90E-04         lb/ton =           Ethyl benzene:         2.40E-04         lb/ton =           Formaldehyde:         3.10E-03         lb/ton =           Hexane:         9.20E-04         lb/ton =           Trimethylpentane:         4.00E-05         lb/ton =           Rethyl chloroform:         4.8E-05         lb/ton =           Propionaldehyde         1.30E-04         lb/ton =           Quinone         1.60E-04         lb/ton =           Total PAH HAPs:         1.100E-04         lb/ton =	Ef   Ib/ton x   200   ton/hr x   2000   Ib/ton   Ib/ton

\*\* summary of source HAP emissions \*\*

Operation Permit No. F151-24031-00064 Plant I D 151-00064

			^ summary of source HAP emissions ^ ^				
	potential to emit		limited emissions	limited emissions			
Hazardous Air Pollutants (HAPs):		Hazardous Air Pollutants	(HAPs):				
Acetaldehyde	0.290	tonlur	Acetaldehyde 0.24	ton/yr			
•	0.280	-	•	,			
Acrolein	0.023	,		ton/yr			
Benzene:	0.342	ton/yr	Benzene: 0.29	ton/yr			
Beryllium:	0.001	ton/yr	Beryllium: 0.00	ton/yr			
Ethyl benzene:	0.210	ton/yr	Ethyl benzene: 0.18	ton/yr			
Formaldehyde:	2.789	ton/yr	Formaldehyde: 2.33	ton/yr			
HCI	20.948	ton/yr	HCI 6.25	ton/yr			
Hexane	0.806	ton/yr	Hexane 0.69	ton/yr			
Methyl chloroform:	0.042	ton/yr	Methyl chloroform: 0.04	ton/yr			
Mercury:	0.001	ton/yr	Mercury: 0.00	ton/yr			
Propionaldehyde	0.114	ton/yr	Propionaldehyde 0.10	ton/yr			
Phenol	0.005	ton/yr	Phenol 0.01	ton/yr			
Quinone	0.140	ton/yr	Quinone 0.12	ton/yr			
Selenium:	0.003	ton/yr	Selenium: 0.00	ton/yr			
2,2,4 Trimethylpentane:	0.035	ton/yr	2,2,4 Trimethylpentane: 0.03	ton/yr			
Toluene:	2.540	ton/yr	Toluene: 2.18	ton/yr			
Total PAH HAPs:	0.158	ton/yr	Total PAH HAPs: 0.14	ton/yr			
Xylene:	0.193	ton/yr	Xylene: <b>0.17</b>	ton/yr			
Total:	28.63	ton/yr	Total: 12.78	ton/yr			

\* \* miscellaneous \* \*

#### 326 IAC 7 Compliance Calculations:

The following calculations determine the maximum sulfur content of distillate # 2 fuel oil allowable by 326 IAC 7:

0.5 lb/MMBtu x 130,000 Btu/gal= 65 lb/1000gal

65 lb/1000gal / 142 lb/1000 gal = 0.5 %

Sulfur content must be less than or equal to 0.5% to comply with 326 IAC 7.

The following calculations determine the maximum sulfur content of waste oil allowable by 326 IAC 7:

1.6 lb/MMBtu x 140,000 Btu/gal= 224 lb/1000gal

224 lb/1000gal / 147 lb/1000 gal = 1.5 %

Sulfur content must be less than or equal to 1.5% to comply with 326 IAC 7.

#### 326 IAC 6-3-2 Compliance Calculations:

The following calculations determine compliance with 326 IAC 6-3-2 for the aggregate drying process with a process weight rates in excess of 30 tons per hour:

limit = 55 \* ( 200 ^0.11) - 40 = 58.51 lb/hr or 256.27 ton/yr

Since the emission limit pursuant to 40 CFR 60 Subpart I is more stringent than this limit, the limit pursuant to 326 IAC 6-3-2 does not apply.

#### PM-10 Emission Limit for Aggregate Dryer:

(99.90 tons PM-10/yr - 10.72 tons PM-10/yr from other sources)

= (Will be able to comply)

89.18 tons PM-10/yr = 20.36 lbs/hr

Controlled PM-10 emissions from the aggregate dryer are 0.17 lbs/hr < 20.36 lbs/hr

PM Emission Limit for Aggregate Mixer and Dryer:

(249.90 tons PM/yr - 40.10 tons PM/yr from other sources)

(Will be able to comply)

 $209.80 \ tons \ PM/yr = 47.90 \ \ lbs/hr$  Controlled PM emissions from the aggregate dryer are 0.33 \ \ lbs/hr < 47.90 \ \ lbs/hr

### 40 CFR Part 60.90, Subpart I (Standards of Performance for Hot Mix Asphalt Plants)

Compliance Calculations:

The following calculations determine compliance with NSPS 40 CFR Part 60.90, Subpart I, which

limits stack emissions from asphalt plants to 0.04 gr/dscf.

(Will be able to comply)

Aggregate Dryer and Mixer Baghouse:

1.45 ton/yr \* 2000 lb/ton \* 7000 gr/lb = 0.002 gr/dscf 525,600 min/yr \* 25,682 dscf/min

Allowable particulate emissions under NSPS equate to 38.57 tons per year. 8.81 lbs/hr

Note:

SCFM = 34,000 acfm \* (460 + 68) / (460 + 239)

= 25,682 scfm

Assumes exhaust gas temperature of 239F, and exhaust gas flow of 34,000 acfm.

# Minor Source Criteria Pollutant Modeling Screening Form - Modeling Results

# Source Summary Modeling Method

Model Used:

Company Name: API Construction Corporation

Source Location: 225 South CR 600 West, Angola, IN 46763

County: Steuben SIC Code: 2951

Permit Number: F151-24031-00064

✓ SCREEN3	☐ AERSCREE
ISC3	<b>△FRMOD</b>

Date Modeling Completed: 2/28/2007

Modeler: Linda Quigley/EVP

## **Modeling Results**

### TABLE 5 - Pollutants Modeling Results: 1 Hour Concentration (μg/m<sup>3</sup>):

The modeled concentrations in this table are the 1-hour concentrations for each pollutant. Use tables 6 and 7 to compare the modeled data to the air quality standard.

Pollutant:	CO	NO <sub>X</sub>	PM <sub>10</sub>	Pb	SO <sub>2</sub>
Concentration (µg/m³):	300.5	141.7	274.7	0	300.4

### TABLE 6 - Pollutants Maximum Concentration (μg/m<sup>3</sup>):

Averaging Period	CO	NO <sub>X</sub>	PM <sub>10</sub>	Pb	SO <sub>2</sub>
1-hour modeled concentration	300.5				
NAAQ Standard	40000				
PASS or FAIL	PASS				
3-hour modeled concentration					270.36
NAAQ Standard					1300
PASS or FAIL					PASS
8-hour modeled concentration	210.35				
NAAQ Standard/CEP Benchmark	10000				
PASS or FAIL	PASS				
24-hour modeled concentration			109.88	0	120.16
NAAQ Standard			150	1.5	365
PASS or FAIL			PASS	PASS	PASS
Annual modeled concentration		11.336	21.976		24.032
NAAQ Standard/CEP Benchmark		100	50		80
PASS or FAIL		PASS	PASS		PASS